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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,816	11/26/2003	Gilles Couvrette		9814

7590 08/17/2006

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EXAMINER	
LUKS, JEREMY AUSTIN	
ART UNIT	**PAPER NUMBER**
2837	

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/723,816	COUVRETTE, GILLES	
	Examiner	Art Unit	
	Jeremy Luks	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kingsley (2,072,372) in view of Wilman (FR 1261203 A).

With respect to Claims 1 and 2, Kingsley discloses an adjustable muffler comprising: an outer cylinder and an inner resonator (Figure 1, #8); a muffler chamber (6) being defined as the space within said outer cylinder and the outside of said inner resonator; an entrance port (4) having a given opening area and through which sad exhaust gases enter said muffler chamber (6); a resonator baffle (11) to divert exhaust gases around said inner resonator (8); said inner resonator (8) having a plurality of resonator holes along its length and through which enters said exhaust gases; a secondary resonator (10) set between said inner resonator (8) and an exit port (5); and a sliding rod (Figure 2, #20) sliding along an axis parallel to the length of said outer cylinder (6). Kingsley fails to disclose a moveable plug to vary the available surface area for exiting exhaust gases; said moveable plug being actuated between closed and open configuration; an annular passage created when said plug slides to an open position; said annular passage surrounding said moveable plug to increase surface area

available for said exhaust gases. Nevertheless, Wilman discloses a moveable plug (Figure 2, #3) to vary the available surface area for exiting said exhaust gases; said moveable plug (3) being actuated between closed and open configuration; an annular passage created when said sliding rod slides to an open position (Figure 2); said annular passage surrounding said moveable plug (3) to increase surface area available for said exhaust gases; actuating said moveable plug (3) into a closed configuration closes an annular passage while decreases exit surface area making the total surface area available at the secondary resonator (9) equal to the available surface area at the entrance port (10) and thus reducing sound level.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Kingsley with the apparatus of Wilman to provide a greater range and more efficient level of backpressure attenuation. The valve of Kingsley has only one opening that can be opened or closed. The secondary resonator has several perforations and can be variably opened by the plug depending on the level of pressure and sound attenuation desired.

With respect to Claims 3-5, Kingsley discloses a sliding rod (Figure 2, #20) activated by actuation means (19), wherein an attachment means (28) is provided to attach said actuation means (19).

With respect to Claim 9, Wilman discloses a cylindrical seal (Figure 1, #2) seals an area between the outside of said inner resonator and the inside of said moveable plug (3).

With respect to Claims 7 and 8, Kingsley discloses supporting segments (15, 3) support the inner resonator (8) and secondary resonator (10) within the center of said outer cylinder (6).

With respect to Claim 9, Kingsley discloses the secondary resonator (10) has a horn like ending.

Response to Arguments

2. Applicant's arguments filed 7/13/06 have been fully considered but they are not persuasive. The examiner still considers that the prior art references of Kingsly and Wilman read on the claims as presented by applicant.

3. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

4. In response to applicant's argument of the prior art failing to teach "on the run functionality," the examiner notes that this subject matter is not present in the claims and will therefor not be considered, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate on the run functionality, since it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art.

5. In response to applicant's argument that there is no reason to combine the references, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

6. In response to applicant's argument that the prior art of Kingsly and Wilman is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the references are both in the field of applicant's endeavor and are reasonably pertinent to the particular problem with which the applicant was concerned.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy Luks whose telephone number is (571) 272-2707. The examiner can normally be reached on Monday-Thursday 8:30-6:00, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeremy Luks
Patent Examiner
Art Unit 2837

LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER